

Response
Application No. 09/629,982
Attorney Docket No. 000921

REMARKS

Claims 5 - 9 are pending in the present application. By this Amendment, claims 5 and 8 have been amended and new claims 11-14 have been added. No new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated June 2, 2006.

As to the Merits:

As to the merits of this case, the Examiner maintains the following rejections:

1) claims 5, 7 and 8 stand rejected under 35 USC 103(a) as being unpatentable over Mitsuhashi et al. (U.S. Patent No. 5,497,193) in view of Anderson (U.S. Patent No. 6,512,548);
and

2) claim 9 stands rejected under 35 USC 103(a) as being unpatentable over Mitsuhashi et al. and Anderson in view of Mizutani et al. (U.S. Patent No. 6,674,464).

Each of these rejections is respectfully traversed.

As to Claim 5:

According to the claim 5, an outputter repeatedly outputs an object scene image having a low resolution when an instruction key is in a non-operative state, and outputs a single frame of object scene image having a high resolution before suspending an output process when the instruction key has been shifted from the non-operative state to an operative state. A first displayer displays on a monitor a moving image based on the object scene images repeatedly outputted from the outputter when the instruction key is in the non-operative state.

A recorder performs a recording process on the single frame of object scene image outputted from the outputter when the instruction key has been shifted from the non-operative state to the operative state. A second displayer displays on the monitor a still image based on the object scene image to be subjected to the recording process by the recorder.

A determiner starts a determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state prior to the second displayer starting a display process, and permits the display process of the second displayer when a determination result is negative, while prohibits the display process of the second displayer when the determination result is affirmative.

Accordingly, after a single frame of the object scene image for recording has been output in response to the instruction key shifted to the operative state, the output process is suspended until a key state is restored from the operative state to the non-operative state. Therefore, it is possible to quickly display the still image representative of the object scene image for recording by extending a time period of the instruction key being in the operative state. On the other hand, if a time period of the instruction key being in the operative state is shortened, a display of the still image representative of the recorded object scene image is prohibited, and therefore, it is possible to quickly resume a periodical outputting of the object scene image having a low resolution.

Thus, the output process is suspended after the object scene image for recording is output in response to an operation of the instruction key, the display process of the recorded object scene image prior to resumption of the display process of a real-time object scene image is permitted/prohibited depending upon a time period of the instruction key being in the operative state, and the determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state is started prior to the second displayer starting the display process. Therefore, it is possible to realize a quick confirmation of the recorded object scene image and a quick resumption of a framing.

As to Claim 11:

According to claim 11, an outputter repeatedly outputs an object scene image having a low resolution when an instruction key is in a non-operative state, and outputs a single frame of object scene image having a high resolution when the instruction key has been shifted from the non-operative state to an operative state. A first displayer displays on a monitor a moving image based on the object scene images repeatedly output from the outputter when the instruction key is in the non-operative state.

A recorder performs a recording process on the single frame of object scene image output from the outputter when the instruction key has been shifted from the non-operative state to the operative state. A second displayer displays on the monitor a default image in place of the moving image when the instruction key has been shifted from the non-operative state to the operative state. A third displayer displays on the monitor a still image based on the object scene image to be subjected to the recording process by the recorder after a display process of the second displayer.

A determiner starts a determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state prior to the third displayer starting a display process, and permits the display process of the third displayer

when a determination result is negative, while prohibits the display process of the third displayer when the determination result is affirmative.

Accordingly, if the operative state of the instruction key is maintained, a still image representative of the object scene image for recording is displayed after a display of the default image. The display of the default image allows suspending an output process of the outputter after the object scene image for recording is obtained, and therefore, it is possible to shorten a time period necessary for a display process of the still image.

On the other hand, if the instruction key is restored from the operative state to the non-operative state, a display of the still image representative of the recorded object scene image is prohibited, and a periodical outputting of the object scene image having a low resolution is resumed. As described above, the display of the default image allows suspending the output process of the outputter after the object scene image for recording is obtained, and therefore, it is possible to shorten a time period necessary for resuming a periodical outputting of the object scene image having a low resolution.

Furthermore, the determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state is started prior to the third displayer starting the display process. Therefore, a display process of the real-

time moving image is resumed without displaying the still image by hastening a timing of the instruction key restored to the non-operative state.

Thus, the default image is displayed in response to an operation of the instruction key, the display process of the recorded object scene image prior to resumption of the display process of a real-time object scene image is permitted/prohibited depending upon the operative /non-operative state of the instruction key, and the determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state is started prior to starting the display process of the recorded object scene image. Therefore, it is possible to realize a quick confirmation of the recorded object scene image and a quick resumption of a framing.

Differences between the Claim Inventions and the Applied References:

According to Mitsuhashi et al., if a shutter button is shifted from a second level to a first level, a real-time moving image is displayed under a live EE mode. If the shutter button is held at the first level for more than two seconds, the latest recorded still image is displayed. Furthermore, if a time period of holding the shutter button at the first level is less than two seconds, no recorded still image is displayed, and a display of the real-time moving image is maintained.

That is, in Mitsuhashi et al., a display process of the latest recorded still image is permitted when an operative state of the shutter button is continued, while the display process of the latest recorded still image is prohibited when the shutter button is shifted from the operative state to the non-operative state.

However, in Mitsuhashi et al., a real-time moving image is displayed during a time period from an operation of the shutter button to a display of the latest recorded still image. In other words, in Mitsuhashi et al., an object scene image is repeatedly output from a camera block until two seconds lapses from the operation of the shutter button.

That is, Mitsuhashi et al. is entirely different from a constitution of claim 5 which outputs the recorded object scene image before suspending the output process when the instruction key has been shifted from the non-operative state to the operative state. Mitsuhashi et al. is also entirely different from a constitution of claim 11 which outputs the default image in response to an operation of the instruction key.

It is noted that Mitsuhashi et al. fail to disclose or remotely suggest anything about a constitution of claim 5 in which the output process is suspended after the object scene image for recording is output in response to an operation of the instruction key, the display process of the recorded object scene image prior to resumption of the display process of a real-time object scene

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image is permitted/prohibited depending upon a time period of the instruction key being in the operative state, and a determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state is started prior to the second displayer starting a display process.

Furthermore, Mitsuhashi et al. fail to disclose or remotely suggest anything about a constitution of claim 11 in which the default image is displayed in response to an operation of the instruction key, the display process of the recorded object scene image prior to resumption of the display process of a real-time object scene image is permitted/prohibited depending upon the operative /non-operative state of the instruction key, and the determining process to repeatedly determine whether or not the instruction key has been restored from the operative state to the non-operative state is started prior to starting the display process of the recorded object scene image.

Accordingly, it is submitted that it is not possible to reach claim 5 or 11 from Mitsuhashi et al.

Anderson discloses to display a captured latest image on an LCD immediately after a capturing process. However, Anderson also fails to disclose or remotely suggest anything about

the above described constitutions of claims 5 and 11. Accordingly, it is submitted that it is also not possible to reach claim 5 or 11 from Anderson.

As to a combination of Mitsuhashi et al. and Anderson, if a display process of Anderson which displays the captured latest image on the LCD immediately after the capturing process is combined with Mitsuhashi et al., the display process seems to be carried out after a step S05 shown in Figure 2 of Mitsuhashi et al. the combined constitution is still entirely different from the constitution of claim 5 or 11, and therefore, it is submitted that it is not possible to reach claim 5 or 11 from the combination of Mitsuhashi et al. and Anderson.

Independent Claim 13:

New independent claim 13 calls for *a determiner for determining, prior to starting a display process of said second displayer, whether or not said instruction key has been shifted from the operative state to the non-operative state so as to permit **only** said second displayer to carry out the display process during a time period of the operative state being maintained when a determination result is negative, and prohibit said second displayer from starting the display process when the determination result is affirmative.*

In contrast, since Mitsuhashi discloses that the EE mode is resumed by the first displayer in step S07 during a time period when the operative state of the shutter button 20 is being

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maintained, Mitsuhashi clearly fails to disclose or fairly suggest permitting only the second displayer to carry out the display process during a time period of the operative state being maintained when a determination result is negative, as called for in new claim 13.

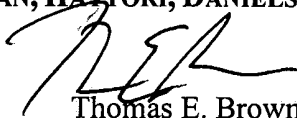
In view of the aforementioned amendments and accompanying remarks, Applicant submits that the claims, as herein amended, are in condition for allowance. Applicant requests such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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